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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,276	09/13/2005	Tsutomu Katayama	SPL-05-1445	2473

35811 7590 12/11/2007
IP GROUP OF DLA PIPER US LLP
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EXAMINER

MCNALLY, DANIEL

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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12/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,276	Applicant(s) KATAYAMA ET AL.	
	Examiner Daniel McNally	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/13/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-8 in the reply filed on 11/19/2007 is acknowledged.

Claim Objections

2. Claim 4 is objected to because of the following informalities: Claim 4, line 2 recites "parts y weight" which appears to be a typographical error "y" should be changed to --by--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites "the crystal nucleating agent" but neither claim 4 nor claim 1, from which claim 4 depends, require using a crystal nucleating agent. Claim 1 recites using a crystal nucleating agent or a resin having a crystallization accelerating effect. It is unclear if claim 4 requires the use of a crystal nucleating agent. It is recommended the applicant actively claims the first resin material comprises a crystal nucleating agent.

Claim 5 recites "the resin having a crystallization accelerating effect" but neither claim 5 nor claim 1, from which claim 5 depends, require using a resin having a crystallization accelerating effect. Claim 1 recites using a crystal nucleating agent or a

resin having a crystallization accelerating effect. It is unclear if claim 5 requires the use of a resin having a crystallization accelerating effect. It is recommended the applicant actively claims the first resin material comprises a resin having a crystallization accelerating effect.

Claim 6 recites "the crystal nucleating agent" but neither claim 6 nor claim 1, from which claim 6 depends, require using a crystal nucleating agent. Claim 1 recites using a crystal nucleating agent or a resin having a crystallization accelerating effect. It is unclear if claim 6 requires the use of a crystal nucleating agent. It is recommended the applicant actively claims the first resin material comprises a crystal nucleating agent.

Claim 7 recites "the resin having a crystallization accelerating effect" but neither claim 7 nor claim 1, from which claim 7 depends, require using a resin having a crystallization accelerating effect. Claim 1 recites using a crystal nucleating agent or a resin having a crystallization accelerating effect. It is unclear if claim 7 requires the use of a resin having a crystallization accelerating effect. It is recommended the applicant actively claims the first resin material comprises a resin having a crystallization accelerating effect.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Koshida et al. [WO02/057353].

Koshida discloses resin products for laser welding. Koshida discloses two resin parts, a first part transmits laser energy and a second part absorbs laser energy. The first part comprises a resin material, Koshida discloses using a polyamide resin or a combination of polyamide resins (page 6), and may also contain nucleating agents (page 14). The second part comprises a resin material, Koshida discloses using a polyamide resin (page 6), and additives that are absorbent to laser light.

With regard to claim 2, Koshida discloses using polyamide for both of the first and second resin parts (page 6).

With regard to claim 3, Koshida discloses using polyamide¹¹ and/or polyamide¹².

With regard to claim 8, Koshida also discloses the first resin part may include additives that are weakly absorptive to laser light, such as colorant agents.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koshida in view of Joachimi et al. [US2003/0130381].

Koshida discloses resin products for laser welding. The applicant is referred to paragraph 6 above for a detailed discussion of Koshida. Koshida discloses using a nucleating agent but does not explicitly disclose using talc at a desired content level.

Joachimi discloses a molded composition for a laser treatment process. The composition comprises 35-99.999 wt. % thermoplastic material, where the thermoplastic material can be a polyamide, and the composition further comprises 0 to 30 wt. % nucleating agent (paragraphs 0027, 0030 and 0033). Joachimi discloses the nucleating agent as talcum (paragraph 0122). Joachimi disclose the composition of the invention improves the surface quality of the final product (0023).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the resin part of Koshida to include a talcum nucleating agent at the desired content level in order to improve the surface quality of the resin part.

With regard to claims 5 and 7, in the embodiment where the first resin material comprises a crystal nucleating agent, a resin having a crystallization accelerating effect is not required. Therefore claims 5 and 7 do not further limit this embodiment of the invention and applied references satisfy the limitations of claims 5 and 7.

9. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koshida in view of Joachimi Katayama et al. [US5795931].

Koshida discloses resin products for laser welding. The applicant is referred to paragraph 6 above for a detailed discussion of Koshida. Koshida does not disclose using polyamide 6 and/or polyamide 66 as a resin having a crystallization accelerating effect at a desired content level.

Katayama discloses a method of molding a weldable material. Katayama discloses using a mixture of polyamide 12 and polyamide 6. Katayama discloses if the content of polyamide 12 is too much than the heat stability is reduced and that if the content of polyamide 12 is too low than the calcium chloride resistance cannot be obtained. Katayama also discloses that if the content of polyamide 6 is too little than the welding ability is deteriorated and that if the content of polyamide 6 is too much than the heat stability is deteriorated. One of ordinary skill in the art would have readily appreciated optimizing the content of the polyamide 6 material in order to achieve the desired balance between the heat stability and weldability of the resin material.

It would have been obvious for one of ordinary skill in the art at the time of invention to modify the first resin part of Koshida to include a mixture of polyamide 12 and polyamide 6 as taught by Katayama in order to produce a product with sufficient heat resistance and weldability.

With regard to claims 4 and 6, in the embodiment where the first resin material comprises a resin having a crystallization accelerating, a crystal nucleating agent is not required. Therefore claims 4 and 6 do not further limit this embodiment of the invention and applied references satisfy the limitations of claims 4 and 6.

Conclusion

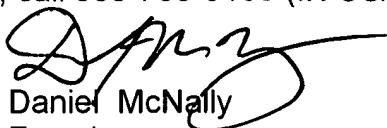
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel McNally whose telephone number is (571) 272-2685. The examiner can normally be reached on Monday - Friday 8:00AM-4:30PM.

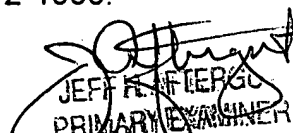
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Daniel McNally
Examiner
Art Unit 1791


JEFF K. FIERGO
PRIMARY EXAMINER
GROUP 1300

/DPM/
December 7, 2007